DTC ELECTE OCT 2 7 1989 F

FERRY SERVICE SURVEY

ON

UPPER GREAT LAKES

GREAT LAKES-SAINT LAWRENCE

SEAWAY NAVIGATION SEASON

EXTENSION PROGRAM

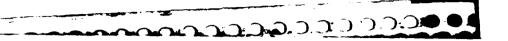
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	Car-Passens	•	J, J	J== 10	,,
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There are three major ferry a Currently, three ferry course months of the year. Two served on not operate on winter sche ations in the Upper Great Labareas surveyed are outlined.	es remain open o vices - one to Nedules. A prelin kes, from lower	during the wi Neebish Islam ninary survey Lake Superio	inter months nd and the o y was made o	s and operate of carfello, New	perate twelve o Lime Island erry oper- York. The
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SYNOPSIS

There are three major ferry areas in the five surveyed reaches of the Upper Great Lakes:

Reach No. 2 - Straits of Mackinac - St. Marys River

Currently, three (3) ferry courses remain open during the winter months and operate twelve months of the year. They are:

- 1. Sugar Island Ferry (Bubbler-Flusher Assist)
- 2. Drummond Island Ferry (Ice Breaker by request)
- 3. St. Ignace-Mackinaw Ferry (Ice Breaker by request).
 - (R.R. Ferry Chief Wawatam)

Two services—one to Neebish Island and the other to Lime Island—do not operate on winter schedules. Currently, the Neebish Island

Ferry shuts down during winter months when the West Neebish channel
is closed off to shipping and freezes over. If the West Neebish channel
is opened to downbound traffic during winter months, the ferry service
will, most likely, be resumed. The Lime Island to mainland ferry
service is maintained by a fuel supply company located on Lime Island:
it is used to carry employees back and forth, except during freeze-up,
when an air boat is intermittently employed (demonstration program
activity).

Reach No. 3 - Alpena - Monroe, Michigan

Ferry services in this reach are located in the St. Clair River and Detroit River. These rivers do not have solid ice cover during the winter months. The services operate twelve months of the year with ice breaker help, by request. The ferry services are located as follows:

- (1) Port Huron Sarnia(R.R. car Tug-Barge C. & O. R.R.)
- (2) Marine City Sombra(Passenger Car, Dalgety & Dean Co.)
- (3) Roberts Landing Port Lambton
 (Passenger Car, Jillson Bros.)
- (4) Algonac Harsens Island(Passenger car, Champion Ferry Service)
- (5) Algonac Russells Island Walpole Island
 (Passenger Car, Dean Bros.)
- (6) R. R. car Tug-Barge U.S.A. to Canada

 (Grand Trunk R.R. near Detroit-Windsor Tunnel)
- (7) R. R. car Tug Barge U.S.A. to Canada
 (Norfolk and Western R.R. near Ambassador Bridge)

Reach No. 4 - Monroe, Mich. - Cleveland, Ohio

The thirteen (13) ferries in the Lake Erie Island complex do not operate during the winter months. The ferries are all under 100 Gross Reg. Tons, except the Pelee Islander, which is 334 G.T. The area has sufficient ice cover to prevent operation of light-weight vessels. Historically, people of the islands resort to air and "over-ice" trave! during the winter months.

GREAT LAKES AND ST. LAWRENCE SEAWAY NAVIGATION SEASON EXTENSION PROGRAM CARFERRIES ON THE UPPER GREAT LAKES

Introduction

A preliminary survey was made of carferry operations in the Upper Great Lakes, from lower Lake Superior to Buffalo, New York. The areas surveyed are outlined in inclosure No. 1. The Canadian side of the lakes and connecting rivers was not included. Source information was gleaned from "Greenwoods," "Great Lakes Pilot," telecommunications with U. S. Coast Guard Zones, "in-house" reference material and operations, "Oil Can," "Taconite" and "Coal Shovel." Information pertaining to the various upper Great Lakes reaches is listed below:

Reach #1 - Lake Michigan

This reach includes the greater part of Lake Michigan to a meeting line, north, with Reach #2 (Ref. incl. No. 1). In the main, this reach is devoid of small car ferries, under 100 gross tons, except the "Gills Rock - Washington Island operation" which functions mainly during the summer and tourist season. (On occasion, and when in the area, a Coast Guard Ice Breaker has provided open water.) The large carpassenger ferries (3,000-4,000 gross tons) operate twelve months of the year and at times operate as ice breakers. Lake Michigan in the

Reach #1 - continued

"cross lake" lanes, between Frankfort, Michigan and Milwaukee,
Wisconsin latitudes, is open water during the year with some "pile-up."
occasionally, of ice on the eastern shoreline with high westerly winds.
This "pile-up" is relieved by ice breakers to maintain traffic. Further information on this reach is contained in inclosure No. 2.

GENERAL INFORMATION

1. Short Run Ferry Services

- (a) Gills Rock Washington Island
 - (1) <u>Voyager</u> 100 Gross Tons Washington Island Ferry Lines - Try to run one (1) ferry during winter months. <u>ICING PROBLEM</u>. Pres.: Arnie Richter.
 - (2) C. G. Richter 100 Gross Tons and under.
 - (3) Eyrabakki 100 Gross Tons and under.

(b) Washington Island-Rock Island

(1) Any of the above ferries - operated during tourist season - summer

2. Green Bay

Big Coal Docks at City of Green Bay. Huron Cement operates shipping in and out of Green Bay - minimum shipping is interrupted when the Bay ices over during winter months.

A revised and upgraded ferry service between Muskegon and
 Milwaukee is in an evaluation stage thru the West Michigan

Reach #1 - continued

Shoreline Regional Development Commission.

NOTE: No information was forthcoming on Package Freight Vessels.

Reach #2 - Straits Area - St. Marys River

The Straits of Mackinac and the St. Marys River area have a major network of small ferry and package freight services. The greater part of this service stops during the months of January, February and March. The Chief Wawatam, a railroad car ferry (2,990 Gross Tons), operates year around between St. Ignace and Mackinaw City. A large number of combination package-passenger freighters ply these waters during "open water" seasons. Historically, freight is shipped and stock-piled during the "open water" period in preparation for the winter three month "lay-up". After "freeze-up," passenger transportation is maintained by snowmobile, aircraft and pedestrianism. In the St. Marys River section of the area, ferry services to Sugar Island, Neebish Island, Lime Island and Drummond Island are being evaluated during the winter months. Operation of a "beefed-up" ferry and maintenance of an open water course at Sugar Island is in the observation phase. A similar situation exists at Drummond Island without added ferry power and hull reinforcement. Operation of the ferry at Neebish Island is contingent to maintenance of an ice bridge and unobstruction of the open water ferry course. Movement of vessels during winter months is limited to the

Reach #2 - continued

east channel at Neebish Island. Service is maintained year around at Lime Island through use of a small power boat in the ice-free season and an air boat during the winter months.

The Beaver Island Boat Co. provides service, with two ferries, between the island and Charlevoix, from April through December; no winter service is maintained. Inclosure No. 1 shows the extent of Reach #2. Inclosure No. 3 is a table of Ferries and Package-Passenger Freighters.

GENERAL INFORMATION

Ferries - 24 (23-100 G.T. and under; 1 - Chief Wawatam - 2,990.)

Period of Operation - March through December, except operations at Sugar Island, Drummond Island, and Chief Wawatam, which are scheduled for 12 months' operations.

Season (Heavy) - 2 months - July and August (about 50% of total traffic.)

Season (Light) - Remainder of operation year (50% and less).

Reach #3 - Alpena - Monroe, Michigan

Reach No. 3 runs from Alpena, Michigan to Monroe, Michigan. Ferry services are found in the St. Clair and Detroit Rivers. The St. Clair River services start at Port Huron with a railroad car Tug-Barge operated by the C. & O. R.R. between Port Huron and Sarnia. The next service down river is between Marine City and Sombra, where one (1) passenger-car ferry is in operation. Between Roberts Landing and Port Lambton three (3) passenger-car ferries are operated by the Jillson Bros. Champion Ferry Service has four (4) passenger-car ferries running between Algonac and Harsens Island. The Dean Bros. operate the "Pride of the Lake" between Algonac, Russells Island and Walpole Island. In the Detroit River there are two R.R. car Tug-Barge operations, one operated by the Grand Trunk R.R., in the vicinity of the Detroit-Windsor Tunnel, and the other by the Norfolk and Western R.R. near the Ambassador Bridge. In both operations railroad cars are barged across the river to either the United States or Canada. The St. Clair River and Detroit River ferries operate twelve (12) months of the year, with occasional ice-breaker help. Ice-breaker help is particularly needed in the St. Clair River, at the head of Russells Island. Inclosure No. 1 shows the location of Reach No. 3. Ferry location information is in the tables of Inclosure No. 4.

Reach #4 - Monroe, Mich. - Cleveland, Ohio

Ferry operation in Reach No. 4 is limited to the Lake Erie Island area. Five companies provide passenger-auto ferry service during the open water seasons. Services provided are as follows:

Company	Service
Neuman Boat Line, Inc. Foot of Columbus Avenue P. O. Box 604 Sandusky, Ohio 44870	Sandusky, Kelley's Island, Marblchead, N. Bass Island, S. Bass Island and Middle Bass Island
Parker Boat Line, Inc. Put-In-Bay, Ohio 43456	Sandusky, Port Clinton, S. Bass Island, N. Bass Island, and Middle Bass Island
Cedar Point Transportation Co. Sandusky, Ohio 44870	Sandusky - Cedar Point
Miller Boat Line Put-In-Bay, Ohio 43456 (some indication of liquidation)	Catawba Island, S. Bass and Middle Bass Islands
Pelee Shipping Co. 669 Talbot Street St. Thomas, Ontario, Canada	Sandusky, Pelee Island and Ontario, Canada

Inclosure No. 5 is a table of pertinent information on ferries of the area.

The ferries of the Lake Erie Island area operate during the open water seasons. When solid ice forms the ferries shut down. Airplane service continues during the winter months. Historically, stock-piling for winter months is done before ferry shut-down. In addition to air

Reach #4 - continued

pedestrianism, etc. The importance of maintaining ice cover during winter months is emphasized by U. S. Coast Guard action to warn the people of any ice-breaking procedures in the South Passage.

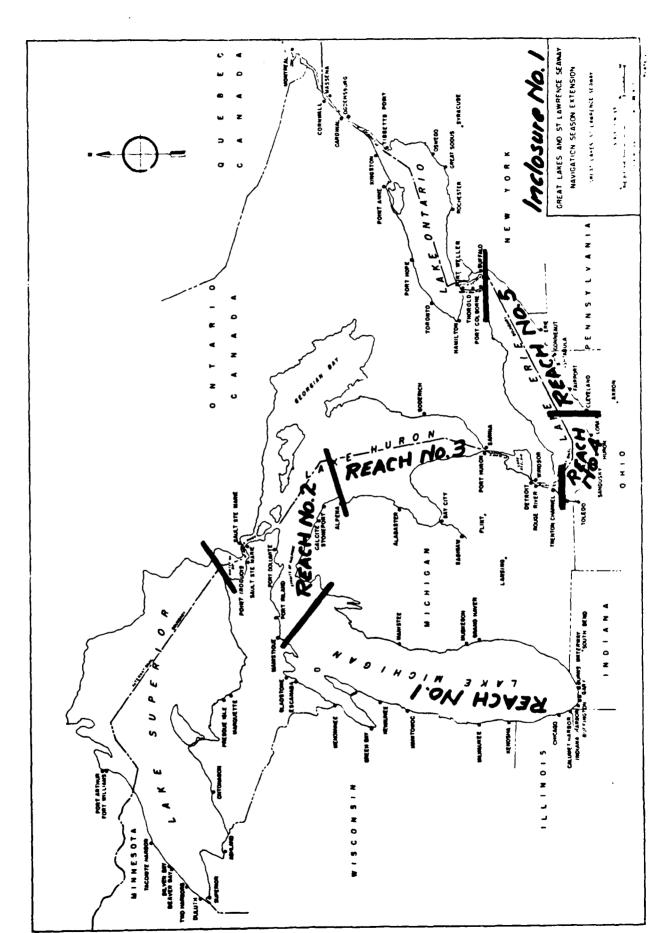
Inclosure No. 1 indicates Reach No. 4. Inclosure No. 6 shows the Lake Erie Island area with courses of the various ferries.

Reach #5 - Cleveland, Ohio - Buffalo, N. Y.

The reach from Cleveland to Buffalo. New York has no ferries, according to "in-house" and other reported sources of information.

Oil tank barges move in and out of ports along the shoreline in open water. The tanker, "Laduca" operates in Buffalo Harbor. No specific reing problems have been reported.

Reach No. 5 is shown in Inclosure No. 1. As no ferries were located within the reach, a table inclosure is not included.



							REAC	REACH NO. 1 - LAKE MICHIGAN	AKE MIC	IIGAN					
	Gross	ž						Mid-		Inter-		Auto	Rail	Pass-	
	Reg	Reg						Summer	Summer	-	Winter	Cana-	Capa-	Capa-	
Vessel	Tons	Tons	Keel	B. P.	Overall	Beam	Depth	Draft	- 1	- (Draft	city	city	city	Fe
Atkinson, Arthur K.	3,241	1,826	372'0"	372'0"	384'0"	0.99	20'6"	14.11.	14.11.	14'11"	14'11"	10	28	112	Kewaunee Inspected for Frankfort - Manitowoc/further service
Badger	4.244	2, 033	388'0''	383'0'' 410'6"	410'6"	.9.69	24'0"	18'7"	18'7"	18'7"	18'7"	45	30	520	Hartor I total problem Ann Artor N. R. Ludington-Kewaunee / Manitowoc /C. & O. R. R. Milwaukee/
City of Green Bay	3,250	1, 833	364'6"	366'0"	380'0"	5813"	25'0"	15'2-1/2" 15'2-1/2" 15'2-1/2"	15'2 - 1 /2"		15'2-1/2"	c c	28	350	"Layed-up" - not is service for 2 yrs - Ann Arbor R.R.
City of Midland	3,968	833	388'0"	388'0''	388'0"	406'0"	23'6"	18'7-1/2" 18'7-1/2" 18'7-1/2" 18'7-1/2"	18'7-1/2"	18:7-1/2"	18'7-1/2"	100	30	471	Ludington (Kewaunee) (Manitowoc) C. & O. R. R.
City of Milwaukee	2, 942	1, 498	347'9"	348'0"	360.0,	56'3"	21.6.	17'4"	17'4"	17'4"	17.4"	Nono	26	16	Muskegon-Milwaukee-out of commis- sion for 3 years - Wis Mich. Steam Co.
City of Saginaw 31	3,327	762	368'0"	368'0"	381'6"	57'0"	22'6"	18.37	18'3"	18'3"	18,3,,	25	28	288	Scrapped - (burned)
Eyrarbakki	98	39	80.0"	82'6"	85'0"	35'6"	0.2	513"	5.3.	5'3''	5'3"	15	None	100	Gills Rock - Washington Island
Madison	2, 942	1, 488	347'9"	348'0"	360'0"	, 6, 95	21'8"	17.4.,	17'4"	17'4"	17'4"	None	26	8	Muskegon-Milwaukee-Grand Trunk RR
Pere Manquette 10	2, 769	762	372'0"	372'0"	400.0,,	53'0"	.0.22	16.0.	16.0.	16.0.	0.91	None	2.1	None	Toledo Dry Dock
Pere Marquette 21	3,558	1,953	388'0"	388'0"	400,0,,	,,0,95	21'6"	16.6"	9.91	9.91	9.91	23	30	132	Out of Service
Pere Marquette 22	3,541	1, 925	388'0"	388'0"	400.0.	.,0,99	21'6"	16'7-1/2" 16'7-1/2" 16'7-1/2"	16'7-1/2"	16'7-1/2"	16'7-1/2"	23	30	205	Out of Service
Richter, C. G.	82	55	6513"	65'3''	70.6"	25'0"	1.516	8.5"	8'5"	8.5.	. c. c.	10	None	100	faland ar br
Spartan	4,244	2,033	388'9"	388'0"	410'6"	59'67	24.0.,	13.7	18.7	18'7"	18.7.,	in T	30	520	Ludington-(Manitowoc) C. & O. R. R. (Kewaunee.)
ार Viking B	2, 713	1,287		3.44.0.	160'0"	1.95	21'6"	15/1-1/2" 15/1-1/2" 15/1-1/2"	13.11-172"	15.1-1/2"	15'1-1/2"	1	26	350	Frankfort - (Manitowac) Ann Arbor R. R.
Voyager	ž	99	£0,05	9.1.1	, 9.02	18,0	0,6	.,0,:	. 0,1	8.0.1	4.0.	=	None	146	Gills Rock-Washington Island

HEACH NO. 2 - STRAITS AREA - ST. MARKS RIVER

											•				
Vessel	Gross Reg. Tons	Net Reg. Tons	Keel	B	Overall Beam Derth	Beam	Depth	Mid- Summer Draft	Summer Draft	Inter- mediate Draft	Winter Draft	Auto Capa- city	Rail Car Cape	Pass- enger Capa-	
Algoma	100													[]	St. Ignace-Mackinaw Island-Arnold Line
Busy Bug	20													•	Cheboygan-Bois Blanc Island
Billy Dick *	100														Mackinaw City-Mackinaw Island
Beaver Islander	92	49	.,0,06	.,0.06		27'6"	.,6,6	7,3"	7,3.	7.3.,	7:3"	12	None	500	Charlevoix-Beaver Island-Beaver Island Boat Co.
Chippewa .														9 ,	St. Ignace-Mackinaw City - Arnold Lines
Chief Wawalam	2,990	1, 793	332'0"	338'9"	351'0"	62'3"	25'0"	18.1.	19.1.	19.1"	161	None	22	æ	St. Ignace-Mackinaw City-Rallroad- Mackinaw Transportation
Christina-Mae +	100														Mackinaw City-Mackinaw Island- Straits Transportation
Charle-Ann II														J	Cheboygan - Bois Blanc Island
Drummond Islander	48	57	59.6	59'8"	64'0"	30.0	8.3.,	1.0.1	.,0,2	1.0.1	1,0,1	σc	None	50 1	Drummond Island-Tour Village
Drummond Islander II 97	rH 97	99	9.09	.8.09	85.0"	36'0"	.,0,6	9.1	9.1	7.6"	9.1	=	None	175 1	Drummond Island-Tour Village
Fmerald Isle .	100													v .	St. Ignace-Mackinaw Island-Arnold Lines
Ethel-Marie .	100													-	Mackinaw City-Mackinaw Island
Felecity .	100													_	Mackinaw City-Mackinaw Island
* ES III CLOSURE	100														St. Ignace-Mackinaw Island-Arnold Lines
a Island Princess •	100	•												-	Mackinaw City-Mackinaw Island- Straits Transportation

HEACH NO, 2 - STRAITS AREA - ST, MARYS RIVER Page 2

													Red I	P884	
,	Gross Reg.	Net Reg.		c c	1	Î	C. A. C.	Mid- Summer Draft	Summer	In'er- mediate Draft	W inter Draft	Auto Capa- city	Caps -	Caper City	Periv Course
Vessel	Tons	Tons	Ke	Keel B. F.	Overall Beam Deput	nean	DEDIN								
Island Queen	06	20	71'0"	71'0" 71'0"	75.0"	34'9" 10'0"	10.01	4,0,,	1.0.1	.,0,2	1.0,1	15	None	150 N	Mackinaw City-Mackinaw Island- Straits Transportation
Mackinaw Islander » 100	001													υ,	St. Ignace-Mackinaw Island-Arnold Lines
Mohawk .	100													S	St. Ignace-Mackinaw Island-Arrold Lines
Miss Margie a	100													æ	Mackinaw City-Mackinaw Island
Neebish Islander	6	42	.0.09	.9.09	55'0"	20.1.,	6.0′′	۶،0,	5'0'	5'0"	2,0,,	5	None	20 N	N. coust Island-Mainland
Ottaws .	100													ν:	St. Igna.e-Mackinaw Island-Arnold Lines
South Shore	67	74	.0.09	.0.09	64'9"	24.0.	.,9,6	8'5"	8.5.1	8151		œ	None	280 C	Charlevoix-Beaver Island-Beaver Island Boat Co.
Straits of Mackinac II	83	*	10'8"	8.02	89'11"	27.0,,	8.8	1.0.2	7.0.1	,,0,,2	7.0.1 N	None	None	500 N	Mackinaw City-Mackinaw Island
· Islander •	100		16,61	.6,62	84.6"	29,62	.6.9	2,0,0	2,0,	5,0,,	2,0,,		None	ur.	St. Marte-Sugar Island
The Welcome	100													•	Mackinaw City-Mackinaw Island

Table information limited to 100 Gross Tons or less.

Arnold Lines - 7 Ferries (St. Ignace-Mackina» Island) (Algona, Chippewa Emerald Isle, Heron, Mackinae Islander, Mohask and Ottawa)
Sheplers, Inc. - 5 Ferries (Mackina» City-Mackinae Island) (Straits of Mackinae Herone, The Welcome)
Straights Transportation - 4 Ferries (Mackinae City-Mackinae Island) (Straits of Mackinae Herones, Island Queer and Christica-Mac)
Independents - 9

INCLOSURE #3 (Continued)

REACH NO. 3 - ALPENA - MONROE, MICH.

	Gross Reg.			1		ć	į	Mid- Summer	w	Inter- mediate	Winter	Auto Capa-	Rail Car Capa-	Pass- enger Caps-	Ferly Course
Vessel	Tong	Tons	Keel	2	Keel B. P. Overall	Seam	neprin		11817	177.7					Detroit-Windsor (Car / R. R. / Baige-
H. Cassidy	80	16	52'3"	52'3"	65.0	29'0"	9,8	7'4"	7.4"	7.4"	7.4"	21	None	90	Tug-Norfolk & Western R. R. Algonac-Harsens isle (Champion) (1)
Daldean (Can.)	145	66	63.0"	63'3"	75'0"	38.0"	8,0,,	6.3,,	6.3.	6,3,,	6'3"	12	None	125	Marine City-Sombra (Dalgety + Dean)
Ontamichi	52	4 3	.82,3,	52'3"	65'0"	29'0"	1,918	.,6,9	,,6,9	,,6,9	6,6,	13	None	40	Roberts Landing-Port Lambton (Jillson Bros.)
F. A. Johnson															Detroit -Windsoy (R. R. Car-Tug- Barge)(Grand Trunk-Canadian
Larry	37	33	9.67	49.6	54'0"	20,0;	2.0,,	3,7,,	3,1,,	3,1,,	3.7.,	•	None	9	National) Roberts Landing-Port Lambton (Tillery Brow) (St. Clair)
	37	34	49.6"	49'8"	54'0"	20,0;	2,0,,	3,1,,	3,7,,	3,1,,	3.7,	φ	None	Ç	Roberts Landing-Port Lambton (Jillson Bros.)
North Channel	67	46	62'0"	62'0"	75'0"	30'6'	8,0,,	1.9	9,1,,	6'1"	6'1"	13	None	100	h:gona -Harsens Isle (Champion) (2)
Pere Marquette 10 2,769	0 2,769	762	372'0"	372'0" 372'0" 400'0"	400.0.	53'0"	22'0"	16'0"	16'0"	18'0"	.,0.91	None	27	None	Converted to barge - Port Huron- Samia (C&O R. R. Car Ferry)
Pride of Lake *	100														Aigonac-Russell-Walpole Islands (Deans)
St. Clair Flats	65	90	.9,29	52'8"	.0,59	29.0,,	.9,8	7,4,1	7.4.,	7.4.7	7.4"	13	None	20	Algonac-Harsens Isle (Champion)(3)
South Channel .	901														Algonac-Harsens Isle (Champion)(4)

South Channel • 100

															Incl. #2
						REACH	NO. 4 - N	TONROE, M	IICH. · CL	REACH NO. 4 - MONROE, MICH CLEVELAND, OHIO	읽		11.0	Dage	
Vessel	Gross Reg. Tons	Net Reg. Tons	Keel	Keel B. P. Overs	Overall	Beam	Depth	Mid- Summer Draft	Summer Draft	Inter- mediate Draft	Winter	Auto Capa- city	Car Capa-	rass- enger Capa- city	Ferry Course
Challenger	92	4 8	6,09	.6,19	70.07	35'6"	10'0"	+.9	+.9	+.9	. + . 9	c:	None	250	Passenger service, including auto-
Commuter Corsair	81 13	œ	6,19	61'9"	64'6"	33'0"	10.6	5'8"	3.37	5,8"	5'8"	6	None	155	Kelley's Island - Marblehead -
Kelley Islander	95	65	88'3"	88'3"	88'3"	100'0"	34'3"	8'0"	71.3	713"	7.3"	15	None	155	Island - Middle Bass Island
Erie Islander	59														Passenger service, including auto-
Yankee Clipper	4.	10	.0.09	6119.,	.,0,01	25'6"	7,6,,	1,0,1	1.0,1	1.0,1	1,0,1	10	None	150	mobiles, between Sandusky - Port Clinton, South Bass Island, North Bass Island - Middle Bass Island
Cedar Point	12														Passenger service between
Cedar Point II	13														Sandusky and
Cedar Foint III	12														Cedar Point
Put-In-Bay	92	62	60'3"	6 1'3"	64.9	32'9"	6.46	8,0,1	8'0''	8'0"	8'0''	10	None	150	Passenger service, including auto-
West Shore	94	63	60'3"	6.073	54'4"	30,6	4.3.	1,0,k	8.0,,	8,0,,	8.0.1	c.	None	244	mobiles, between Catawba Island and South Bass Island - Middle
S Miller, Wm. M.	96	6.5	60'3"	٤.09	. 6, 1:1	35,0,	1.6.6	.,9,8	8'6'	8'6"	.,9,8	c.	None .:	260	Bass Island

Passenger service, including auto-tion is between Sandusky - Polici Island - Ontario (Kingsville-Leamington)

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Pelee Islander

